AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. — 9. (Cancelled)

10. (Currently Amended) A computer implemented method of generating a plurality of simulation results for an oilfield reservoir, comprising:

obtaining a plurality of cases and a plurality of scenarios comprising a plurality of grid geometry parameters describing the oilfield reservoir;

forming, using a computer, a plurality of simulator input files, each of the plurality of simulator input files comprising one of the plurality of cases and one of the plurality of scenarios wherein the plurality of simulator input files is stored in memory of the computer;

generating, using the computer, a tree comprising a first case as a root node of the tree, a first scenario as a first child node of the root node, a second case as a second child node of the root node, and a second scenario as a child node of the second child node, wherein the grid geometry parameters of the first case and the second case are different, wherein the grid geometry parameters of the first case and the first scenario are identical, and wherein the grid geometry parameters of the second case and the second scenario are identical;

storing the tree in the memory of the computer;

selecting, using the computer, a subset of the plurality of simulator input files from the tree, wherein the plurality of scenarios includes the first scenario and the second scenario, and wherein the plurality of cases includes the first case and the second case;

submitting the selected subset of the plurality of simulator input files to a simulator executing on the computer, wherein the simulator executes a simulation of the oilfield reservoir based on the selected subset of the plurality of simulator input files to generate the plurality of simulation results for the oilfield reservoir;

obtaining the plurality of simulation results; and

displaying the plurality of simulation results on a display device of the computer.

11. — 21. (Cancelled)

22. (Currently Amended) A computer readable medium storing computer executable instructions which when executed on a computer perform a method of generating a plurality of simulation results for an oilfield reservoir, the medium comprising instructions to:

obtain a plurality of cases and a plurality of scenarios comprising a plurality of grid geometry parameters describing the oilfield reservoir;

form a plurality of simulator input files, each of the plurality of simulator input files comprising one of the plurality of cases and one of the plurality of scenarios wherein the plurality of simulator input files is stored in memory of a computer;

generate a tree comprising a first case as a root node of the tree, a first scenario as a first child node of the root node, a second case as a second child node of the root node, and a second scenario as a child node of the second child node, wherein the grid geometry parameters of the first case and the second case are different, wherein the grid geometry parameters of the first case and the first scenario are identical, and wherein the grid geometry parameters of the second case and the second scenario are identical;

select a subset of the plurality of simulator input files from the tree;

submit the selected subset of the plurality of simulator input files to a simulator, wherein the simulator executes a simulation of the oilfield reservoir based on the selected subset of the plurality of simulator input files to generate the plurality of simulation results for the oilfield reservoir;

obtain the plurality of simulation results; and

display the plurality of simulation results on a display device of the computer.

23. (Cancelled)

24. (Currently Amended) A computer system comprising:

a processor;

a memory operatively connected to the processor; and

a plurality of instructions stored in the memory comprising functionality to:

obtain a plurality of cases and a plurality of scenarios comprising a plurality of grid geometry parameters describing the oilfield reservoir;

form a plurality of simulator input files, each of the plurality of simulator input files comprising one of the plurality of cases and one of the plurality of scenarios wherein the plurality of simulator input files is stored in the memory;

generate a tree comprising a first case as a root node of the tree, a first scenario as a first child node of the root node, a second case as a second child node of the root node, and a second scenario as a child node of the second child node, wherein the grid geometry parameters of the first case and the second case are different, wherein the grid geometry parameters of the first case and the first scenario are identical, and wherein the grid geometry parameters of the second case and the second scenario are identical;

select a subset of the plurality of simulator input files from the tree;

submit the selected subset of the plurality of simulator input files to a simulator, wherein the simulator executes a simulation of the oilfield reservoir based on the selected subset of the plurality of simulator input files to generate the plurality of simulation results for the oilfield reservoir;

obtain the plurality of simulation results; and

display the plurality of simulation results on a display device.

25. — 27. (Cancelled)

28. (Previously Presented) The method of claim 10, wherein the plurality of scenarios further comprises a plurality of permeability parameters, a plurality of pressure parameters, and a plurality of temperature parameters describing the oilfield reservoir.

29. (Previously Presented) The method of claim 10, wherein the first case further comprises a radial model type.

30. (Currently Amended) The method of claim 10, further comprising:

obtaining a first plurality of keywords from the selected subset of the plurality of simulator input files;

generating a second plurality of keywords by editing the first plurality of keywords; and

submitting the second plurality of keywords to the simulator, wherein the simulation of the oilfield reservoir is further based on the second plurality of keywords.

31. (Previously Presented) The method of claim 10, further comprising:

storing the plurality of simulation results in a results file.

32. (Previously Presented) The method of claim 10, further comprising:

generating a report documenting the plurality of simulation results.

33. — 37. (Cancelled)

38. (Previously Presented) The computer readable medium of claim 22, wherein the plurality of scenarios further comprises a plurality of permeability parameters, a plurality of pressure parameters, and a plurality of temperature parameters describing the oilfield reservoir.

39. (Previously Presented) The computer readable medium of claim 22, wherein the first case further comprises a radial model type.

40. (Currently Amended) The computer readable medium of claim 22, the medium further comprising instructions ~~further comprising functionality~~ to:

obtain a first plurality of keywords from the selected subset of the plurality of simulator input files;

generate a second plurality of keywords by editing the first plurality of keywords; and

submit the second plurality of keywords to the simulator, wherein the simulation of the oilfield reservoir is further based on the second plurality of keywords.

41. (Currently Amended) The computer readable medium of claim 22, the medium further comprising instructions ~~further comprising functionality~~ to:

store the plurality of simulation results in a results file.

42. (Currently Amended) The computer readable medium of claim 22, the medium further comprising instructions ~~further comprising functionality~~ to:

generate a report documenting the plurality of simulation results.

43. (Previously Presented) The computer system of claim 24, wherein the plurality of scenarios further comprises a plurality of permeability parameters, a plurality of pressure parameters, and a plurality of temperature parameters describing the oilfield reservoir.

44. (Previously Presented) The computer system of claim 24, wherein the first case further comprises a radial model type.

45. (Currently Amended) The computer system of claim 24, the instructions further comprising functionality to:

obtain a first plurality of keywords from the selected subset of the plurality of simulator input files;

generate a second plurality of keywords by editing the first plurality of keywords; and

submit the second plurality of keywords to the simulator, wherein the simulation of the oilfield reservoir is further based on the second plurality of keywords.

46. (Previously Presented) The computer system of claim 24, the instructions further comprising functionality to:

store the plurality of simulation results in a results file.

47. (Previously Presented) The computer system of claim 24, the instructions further comprising functionality to:

generate a report documenting the plurality of simulation results.